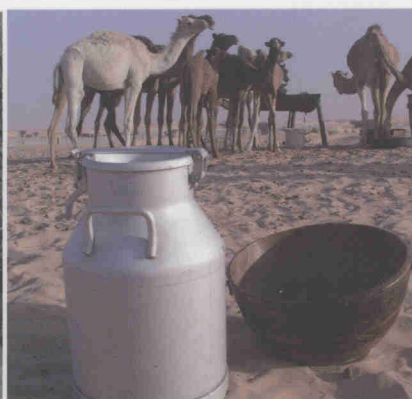


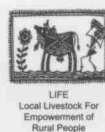
FAO ANIMAL PRODUCTION AND HEALTH



paper

ADDING VALUE TO LIVESTOCK DIVERSITY

Marketing to promote local breeds and improve livelihoods



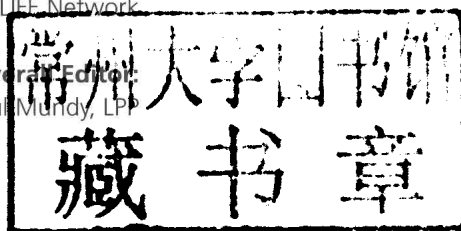
ADDING VALUE TO LIVESTOCK DIVERSITY

Marketing to promote local breeds and improve livelihoods

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Executive summary

Throughout the world and over centuries, small-scale livestock keepers and pastoralists have developed animal breeds that are well suited to their local conditions. These breeds are hardy and disease-resistant; they can survive on little water and scant vegetation. They can continue producing meat and milk in areas where modern, imported breeds succumb without expensive housing, feed and veterinary care. They enable people to earn a living in otherwise inhospitable areas, and embody valuable genetics for future breeding efforts.

Nevertheless, these breeds are in danger of disappearing, pushed out by modern production techniques and out-competed by exotic breeds. Finding niche markets for their products is one possible way of ensuring the survival of these breeds, and enabling the people who keep them to earn more from their existing lifestyle.

EIGHT CASES

This book describes eight cases from Africa, Asia and Latin America where outside interventions have attempted to develop markets for specialty products from local breeds. The cases include wool, cashmere, meat, hides, milk and dairy products, from dromedaries, Bactrian camels, sheep and goats. The countries represented are Argentina, India, Kyrgyzstan, Mauritania, Mongolia, Somalia and South Africa. Some of the initiatives targeted urban markets within the country; others were aimed at the export market.

The case from **India** features wool from the Deccani sheep, a brown-wooled breed native to the Deccan Plateau of southern India. Shramik Kala, a federation of self-help groups, buys Deccani wool, weaves it into a range of attractive bags and other handicrafts, then sells them to Europe, Japan and the United States, as well as within India. Shramik Kala developed this new value chain when the previous market, blankets for use by the army and police, collapsed.

The case from **Kyrgyzstan** deals with cashmere from local goats in the Pamir mountains. Currently the goat herders produce low-value, whole fleeces, which they sell to buyers from China. The Odessa Centre and the Kyrgyz Cashmere Producers' Association are exploring ways for goat keepers to comb out the valuable, fine cashmere and sell it separately to a new group of buyers from Europe and Japan.

Bactrian camels in southern **Mongolia** also produce an under-valued product – wool. A group of volunteers, along with the New Zealand Nature Institute, is organizing local women to spin the wool into yarn and to export it to the United States, where it is sold to hobby knitters.

The first of the two **Argentina** cases also deals with wool. The Linca sheep breed is raised by the Mapuche people in the foothills of the Andes in Patagonia. There is little demand for its coloured wool, so flocks of Linca have been declining. Aided by an NGO, the government and a research institute, a network of women has formed a community sales outlet, the Mercado de la Estepa "Quimey Piuke", to sell ponchos and other traditional items made from the Linca wool.

In the rural Eastern Cape province of **South Africa**, the government has established an abattoir and tannery to slaughter and process the region's native goats. This cooperative-run factory produces meat, sausages and burgers, as well as leather cushions and other handicrafts. It sells the meat products to the Muslim community in nearby towns, and the handicrafts through specialist stores throughout South Africa.

The second case from **Argentina** also deals with goat meat. A group of local institutions in Neuquén province, in Patagonia, has applied for a Protected Domain of Origin designation for the meat of the local Criollo goat breed. This meat is marketed to urban consumers in Neuquén and nearby provinces.

The final two cases focus on milk from dromedaries. In **Mauritania**, the Tiviski dairy is a private company that buys milk from pastoralist herders in the south of the country, chills it and transports it to its dairy in Nouakchott, the capital. There it produces high-quality pasteurized milk, as well as other dairy products. Tiviski has invented camel cheese, and is trying to get regulatory approval to export this to the European Union, a huge potential market.

In **Somalia**, our case paints the picture of a marketing system for dromedary milk that is run by a loose network of female traders. Despite the lack of any central organization, this network collects milk from pastoralist encampments in the interior of Puntland, in northeastern Somalia, transports it to Boosaso, a town on the coast, and sells it uncooled and untreated at markets there. Attempts to improve this chain have had mixed success: low-budget, community-based investments (such as aluminium cans) have been successful, but a new central dairy runs well below capacity.

THE PROMISE OF NICHE MARKETING

These cases show some of the promise and pitfalls of niche marketing of products from local breeds. On one hand niche markets may be vital for the survival of many local breeds which cannot compete with higher-producing exotic breeds in mass markets. On the other hand, many local breeds may be ideally suited for niche markets: they have unique characteristics (coloured wool or hides, extra-fine fibre, meat or milk with special tastes). Many of these traits (such as coloured wool) are undesirable in the mass market, but are ideal for certain market segments – if they are marketed in the right way.

Marketing of products from local breeds can also take advantage of two other characteristics of local breeds: traditional processing techniques (to produce handicrafts or garments with distinctive designs) and strong local ties (since these breeds are found only in certain localities and are raised by certain ethnic groups). Both can be powerful features on which to base a marketing strategy.

Overall, the cases demonstrate that niche marketing of products from local breeds can generate employment and income for the poor – both livestock keepers and others involved in processing and trading the product. It can empower women, reverse the decline in the breeds concerned, and conserve both the environment and cultural values. It can be pro-poor because it is the poor who tend to keep local breeds, and because the type of work and amount of income generated may make it unattractive for wealthier individuals.

MARKETING STRATEGIES

There are various approaches to exploiting a niche market. Among our cases, the most common involved finding new markets, either for an existing product (this is known as **market development**), or for an entirely new product (called **diversification**). Less common were approaches involving existing markets, either for an existing product (**market penetration**) or for a new product (**product development**). After finding a market and developing a value chain, several of the enterprises later shifted their strategy towards lower-risk approaches – either by exploiting existing markets further, or by promoting existing products.

The cases richly illustrate various aspects of the four *Ps* of marketing: product, price, place and promotion. They exploited the special features of the **product**: for example by differentiating them from competing products in terms of colour, taste, texture or quality. Many of these features depended on the particular traits of the livestock breed – coloured wool, fibre fineness, meat taste, and so on.

None of the cases tried to compete on **price**. This is to be expected, since niche products are almost always higher-priced than the nearest mass-market equivalents. Several enterprises positioned their products at the upper end of the market by ensuring quality or by adding value to the raw product.

In terms of **place**, the cases used a variety of sales outlets, including their own stores, third-party retailers, visiting buyers, exports, and the internet. Running its own stores enabled an enterprise to capture more of the value of the final product, but limited the number of customers reached and meant incurring the costs and logistical burden of managing a retail operation.

The enterprises used various approaches for **promotion** of their products. They all drew customers' attention to the unique features of the products or emphasized the products' linkages to their area of origin. Most had some form of branding or labelling, and two had protected their products with geographical indications (a kind of trademark to show the area of origin).

HOW TO GO ABOUT NICHE MARKETING

The interventions included four types of activities: improving **animal production**; **processing**; **organizing**; and **building a value chain**. Of these, improving animal production was part of only two of the cases. The focus of all of the cases was more on processing the product, organizing local people, and building a value chain to link livestock keepers with the market. Accordingly, most of the initiatives worked with groups of processors – spinners, weavers, dairy staff, transporters, designers, traders, etc., rather than (or as well as) the livestock keepers themselves. This shows that for marketing projects, it is necessary to work with people throughout the value chain, and that the livestock keepers, at the beginning of the chain, may not be the first or most important point of contact, even if they and their animals are intended as the main beneficiaries.

The majority of the cases involved a **champion** – a person or organization with a special interest in promoting the enterprise and making sure it works. Individual champions included the founder/owner of a company, a local member of parliament, and committed individuals; organizational champions included NGOs, government agencies, research institutes and donor organizations.

Research was vital to the success of most of the cases. It included research on the existing production process (often done in a participatory way with livestock keepers and other local people), products (usually done by specialist research bodies), and markets (done by marketing organizations and consultants).

Most of the enterprises introduced new **technology** – sometimes expensive and sophisticated (a new factory), and sometimes cheap and simple (combs to separate fine cashmere from coarser fibres). In some cases, the cheaper, simpler technology was more effective than the expensive large-scale investments.

At least four types of **training** were provided: increasing or improving **production** (such as hygienic milk collection), **processing** to add value to products (such as spinning, weaving, sorting and grading), **organization** (group formation and cooperative management), and **enterprise development** (including business and marketing skills).

Building some form of **institution** featured in all eight cases, but the type of institution varied widely: a loose, spontaneous network; production and marketing groups; coordination bodies; large, formal cooperatives; and a private company. Most of these institutions had specialist functions and were active only at one point in the chain, though the larger ones had multiple functions and covered most or all of the chain. None of the institutions attempted to manage all aspects of the chain.

Building institutions is particularly difficult in pastoralist areas because of many factors, including mobile lifestyles and a suspicion of outsiders. Institutions that build on existing social structures, such as kinship ties or trading relationships, are likely to be more successful than those that attempt to start from scratch.

THE CHALLENGES AND OPPORTUNITIES OF NICHE MARKETING

Niche marketing of local breeds faces many **challenges**.

- Local breeds often suffer from a lack of recognition of the value of their products. The products may currently have low quality or be available only in small quantities or during certain seasons.
- Local conditions are often demanding, with distance, drought, disease, and a lack of infrastructure and services all making production and marketing difficult to manage.
- Organizing producers and processors may be difficult, especially among mobile pastoralists.
- Livestock keepers may lack the capacity to manage a market-oriented business.
- Government policies and institutions may be unsupportive.
- It can be difficult to identify a suitable market for products and to establish reliable links with customers, especially in export markets.

Despite these challenges, we can identify many **opportunities** for niche marketing of local breeds:

- Local breeds can produce unique products that can generate significant levels of demand and can help rescue a threatened breed from further decline or extinction.
- Exploiting a local breed is one of the few ways to increase employment and incomes in remote, marginal areas, allowing local residents to maintain their livelihoods.
- Basing an enterprise on a local breed can take advantage of livestock keepers' indigenous knowledge and local people's traditional culture, encouraging the conservation of both.

- Enterprises based on local breeds build on local resources and initiatives. They are likely to be cheaper and more sustainable than enterprises based on imported breeds and technologies.
- A value chain based on local breeds can generate new sources of income, such as tourism or handicrafts. This income benefits local people directly.
- An enterprise based on local breeds is likely to be pro-poor and pro-women, since it is normally the poorer livestock keepers and women who maintain the breeds or who have the skills to process the products.
- A value chain based on local breeds builds the skills of local people and empowers them in relation to the outside world.
- Livestock breeds can stimulate enthusiasm among their supporters like few other products. Such enthusiasm may be vital for marketing efforts to succeed.

RECOMMENDATIONS

- **Use existing resources.** The initiative should be based on existing resources: the livestock breed, natural resources and human resources, and use the environment in a sustainable way.
- **Identify a suitable entry point.** To conserve a breed or benefit livestock keepers, it may be better to focus on some aspect of the chain other than working directly with livestock keepers. For example, developing an urban-based processing industry to increase demand for the raw materials may be the best way to benefit livestock keepers (or conserve the breed).
- **Start small.** The initiative should invest first in human capital and at a small scale, rather than in costly infrastructure. If the activity works, it should then seek more capital investment.
- **Do the research.** It should be based on a thorough understanding of the production system, the product and the market. That means studying the breed and its characteristics, the livestock keepers and their production system, the range of potential products, and the potential customers for the products.
- **Identify special characteristics of the breed.** The initiative should seek ways to market products that reflect these characteristics: by creating new products, refining existing traditional products, or finding new markets for existing products.
- **Find a viable business model.** The initiative should generate income for all actors in the value chain.
- **Focus on quality.** It should emphasize the need to maintain quality. A niche product can command higher prices only if it is superior to alternative products.
- **Build capacity.** The initiative should stimulate the creation of strong local institutions and train people in technical and management skills.
- **Don't depend too much on outsiders.** The initiative may require significant support from outsiders over the medium term, but should not depend on expertise or funding from outsiders over the long term.
- **Ensure long-term demand.** The product chosen should be one where demand is likely to grow over the long term.

- **Don't put all your eggs in one basket.** The initiative should be based on a range of products and markets: that way, it is not a disaster if one product fails to sell or one customer refuses to buy.

CONCLUSIONS

Niche marketing can provide opportunities for sustainable production in marginal areas and can improve the livelihoods of livestock keepers and people involved in the processing and trade of products. It may especially benefit women and the poor. It can also be a tool for conserving breeds.

Efforts to promote niche marketing may help local people connect to markets for the first time, giving them skills that they can use in exploring other markets and developing other enterprises.

Niche markets may allow actors early in the value chain – livestock keepers and small-scale processors – to capture a greater share of the end-value than in a mass market. This will make it attractive for these actors to continue and expand their businesses.

Niche marketing is by nature relatively small-scale. For large numbers of producers, it cannot replace the need to produce products for a wider, mass market. But for local breeds, it may be possible to find a match between the qualities of the breed, the features of a particular product, and the demands of a specific market. Making this match will help conserve the breed as well as provide a livelihood for people involved in the value chain.

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Introduction

Ilse Köhler-Rollefson and Paul Mundy

Livestock production is booming. It already accounts for 40% of the world's agricultural gross domestic product, and livestock production is the fastest-growing sub-sector of agriculture (FAO 2009). Global meat and milk production are expected to double in the first half of the 21st century.

Much of this growth has been through large-scale production systems, often managed by large companies and raising thousands of animals (millions in the case of poultry) under intensive, controlled conditions. But such "factory farms" and large-scale ranches bring with them a catalogue of food-security and environmental problems. Growing animal feed takes about a third of the globe's arable area, using land that could be used to grow crops for human consumption. Keeping large numbers of genetically similar animals together facilitates disease outbreaks and encourages farmers to use more and more antibiotics. Overgrazing results in soil erosion and biodiversity loss. Effluent from huge feedlots pollutes streams and groundwater. Cows belch out greenhouse gases that warm the planet (Steinfeld *et al.* 2006).

SMALL-SCALE LIVESTOCK PRODUCERS AND PASTORALISTS

Small-scale producers and pastoralists offer an alternative. They produce a range of food (meat, milk, eggs), products (hides, wool, dung), and services (transport, land preparation), often in a more environmentally friendly way than large-scale operations. They raise many of their animals on land that cannot be used to grow crops: along roadsides and field boundaries, on fallow land, and in areas that are too dry or wet, too cold or hot, or too steep and rocky for cropping. The animals live off natural vegetation or crop by-products and do not compete with humans for cereals. They recycle waste products such as crop residues and kitchen scraps, fertilize arable soil for the next season's crop, and produce dung that millions use as cooking fuel.

These livestock produce greenhouse gases, to be sure, but most of these gases would result anyway even without grazing: after all, wild herbivores, termites and other decomposers also convert vegetation into carbon dioxide, without producing the meat and milk that people need.

Small-scale livestock production and pastoralism are economically important. The livelihoods of about one billion poor people depend on livestock. About 70% of the world's 880 million rural poor people who live on less than US \$1 per day are at least partially dependent on livestock for their livelihoods. For more than 200 million smallholder farmers in Asia, Africa and Latin America, livestock are the main source of income, and for about 120 million pastoralists worldwide, livestock production is the principal source of livelihood.

Many of these producers raise animals mainly for subsistence. Many others, however, sell all or part of their livestock produce. But they face enormous hurdles in doing so. Many

live in remote areas, devoid of infrastructure such as electricity, roads and cooling facilities, and far from services such as extension advice, markets and veterinary care. Support systems are typically geared to large-scale producers or intensive production. Dairies say it is too costly to collect small amounts of milk from small-scale producers, or complain it is impossible to ensure the quality of their milk. Abattoirs may automatically grade pastoralists' animals lower than equivalent animals raised under intensive conditions. Livestock keepers themselves are often poorly organized. For pastoralists, unpredictable rainfall, scattered grazing, a mobile lifestyle, and cultural values favouring large herds make it hard for them to supply a market on a reliable basis.

Efforts to ensure that poor and marginalized livestock keepers benefit from the enormous potential of livestock have had a depressing record. Most attempts to enable livestock keepers to participate in the market have focused on raising their production by introducing "superior germplasm", i.e. replacing or upgrading existing, locally adapted breeds with high-yielding, exotic animals. But these exotic animals are demanding: without intensive care, ample supplies of good feed and regular veterinary attention, they fail to grow, produce milk or lay eggs. Many farmers cannot afford to provide such ideal conditions. Many animals sicken and die, leaving their owners poorer.

At the same time, increases in production lead to lower prices for livestock products, squeezing out small, uncompetitive livestock keepers. Only ever-larger farmers can stay in business. This has been called the "treadmill phenomenon" (Röling 2009). In North America and Europe, livestock production has become highly concentrated in a few hands. If developing countries follow this trend, this will have dire consequences for the poor. Small-scale livestock keepers and pastoralists in these countries need ways to remain competitive if they are to stay in business.

LOCAL BREEDS AND SPECIES

Many of the animals kept by small-scale livestock keepers and pastoralists are local breeds. These are vital to food security and livelihoods. Under better conditions, they may not produce as much as their high-yielding relatives, but in the harsh environments where they developed, they can produce under conditions where other breeds cannot survive. They are less prone to fall prey to diseases, and are a low-risk proposition for livestock keepers. Many have unique traits, such as disease resistance and drought tolerance, and represent an important source of genetic diversity that animal breeders can use in responding to pest and disease outbreaks and climate change. They are also integral parts of their environment that help sustain biodiversity. Many play a central role in the cultures of the people who keep them.

Since livestock were first domesticated 12 000 years ago, more than 7 000 breeds of livestock have been developed (FAO 2007b, p. 7). Many of these breeds are local: they have been adapted to a specific habitat and shaped, often over centuries, by the cultural preferences of a particular community or ethnic group. Examples are the Boran cattle (raised by the Borana people of northern Kenya and southern Ethiopia), the Garut sheep (raised in the mountains of West Java and used for fighting), and the Nari cattle raised by pastoralists in India.

Local breeds contrast with "international" or exotic, high-performing breeds, which



were produced through intensive selection for very specific traits, often with the use of biotechnology. Examples of such breeds are black-and-white Holstein-Friesian dairy cattle, Large White pigs, and Rhode Island Red chickens.

An alarming trend is the disappearance of large numbers of local livestock breeds. An estimated 209 breeds of cattle, 180 breeds of sheep, and 40 breeds of chickens have become extinct. In all, some 11% of mammalian breeds and 2% of avian breeds are thought to be extinct. The loss of such breeds continues: some 210 cattle breeds and 179 sheep breeds are classified as “critical” or “endangered” (FAO 2007b, p. 39).

There are many reasons for this loss of breeds. Breeds that produce less meat, milk or eggs are being replaced by higher-yielding types (FAO 2007b). Stockholders who maintain traditional, local breeds cannot compete, so either switch to the exotic breeds or give up production altogether. In developing countries, governments, development projects and private companies try to persuade farmers to keep exotic breeds or promote cross-breeding to “improve” the local breeds. Other factors include increasing mechanization and specialization of farming, land-use changes, and policy failures (Box 1).

Governments are sufficiently concerned about this erosion of livestock breeds to issue a *Global Plan of Action for Animal Genetic Resources* (FAO 2007a). This contains recommendations on monitoring the loss of breeds, their sustainable use and development, their conservation, and policies, institutions and capacity building to manage animal genetic resources.

Many of the problems associated with local breeds also face “minor” livestock species, other than the “big five” of cattle, sheep, goats, pigs and chickens. Such minor species include dromedaries and Bactrian camels, donkeys and yaks. Like local breeds, they continue to produce under difficult conditions, but they are being pushed aside by the “big five”, which receive far more attention from policymakers, donors, researchers, extension

BOX 1

Erosion of animal genetic resources

“This erosion has many causes, including changes in production systems, mechanization, the loss of rangeland grazing resources, natural calamities, disease outbreaks, inappropriate breeding policies and practices, inappropriate introduction of exotic breeds, loss of animal keepers’ security of tenure on land and access to other natural resources, changing cultural practices, the erosion of customary institutions and social relations, the influence of population growth and urbanization, and the failure to assess the impact of practices in terms of sustainability, and develop adequate policies and economic measures. Erosion of animal genetic resources threatens the ability of farmers and livestock keepers to respond to environmental and socio-economic changes, including changing diets and consumer preferences.”

Source: *Global Plan of Action for Animal Genetic Resources* (FAO 2007a, p. 5)

BOX 2

Global Plan of Action for Animal Genetic Resources

Strategic Priority 6: Support indigenous and local production systems and associated knowledge systems of importance to the maintenance and sustainable use of animal genetic resources.

- **Action 2:** Support indigenous and local livestock systems of importance to animal genetic resources, including through the removal of factors contributing to genetic erosion. Support may include... **appropriate access to... the market... and adding value to their specialist products.**
- **Action 4:** Promote the **development of niche markets for products derived from indigenous and local species and breeds**, and strengthen processes to add value to their primary products.

Source: FAO (2007a, p. 20), emphasis added

personnel and veterinary staff. They also often perform specific economic roles that may be replaced easily as technology changes.

HOW TO MAINTAIN LOCAL BREEDS?

The erosion of local livestock breeds and minor species is a complex problem, with no single solution: FAO's *Global Plan of Action* contains no less than 23 strategic priorities, each specifying several associated actions.

This book focuses on one approach – promoting the use of niche markets for the products of local livestock breeds and minor species. A series of international agreements support this approach. Under Strategic Priority 6 of the *Global Plan of Action* two action points call on governments to promote the marketing of products based on local breeds and species (Box 2).

Supporting livestock keepers to add value to their traditional breeds also contributes to achieving two of the eight Millennium Development Goals (Box 3).

The Convention on Biological Diversity (Box 4) obliges governments to support traditional lifestyles, biological diversity and cultural practices – of which local breeds and species are an integral part.

WHAT IS NICHE MARKETING?

Niche marketing provides a product or service to a fairly small segment of a market. It can be contrasted with a **mass market**: one that serves the large majority of consumers. Mass-market products in the same category are generally hard to distinguish from one another and compete largely on price. Many such products are traded in bulk on commodity exchanges before they are processed and packaged to be sold to consumers.

For livestock, examples of mass-market products are the beef, chicken or milk sold in supermarkets or butcher's shops, and the wool that goes into the vast majority of woollen